

COURSE INFORMATION

School/Faculty:	Razak Faculty of Technology and Informatics	Page:	1 of 5
Program name:	Executive Diploma of Occupational Safety and Health		
Course code:	FRSS 2223	Academic Session/Semester:	2021/2022-3
Course name:	Occupational Hygiene	Pre/co requisite (course name and code, if applicable):	
Credit hours:	3		

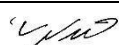
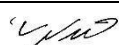
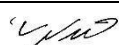
Course synopsis	This course is designed to introduce students on good practice of health at workplace. The course covers occupational health history, occupational health services, principles of toxicology, diagnosis of occupational diseases, prevention of occupational health hazards, noise hazards, audiograms interpretation, vibration hazards, pressure hazards, heat hazards, silica exposure, asbestos exposure, biological hazards and occupational stress.			
Course coordinator (if applicable)	Dr Mohd Yusof Md Daud			
Course lecturer(s)	Name	Office	Contact no.	E-mail
	Dr Mohamad Syazli Bin Fathi	Pejabat OSHE @UTMKL	03-26154524	syazli@utm.my
	Dr. Mohd Yusof Bin Md Daud		019-603 8525	yusof.kl@utm.my

Mapping of the Course Learning Outcomes (CLO) to the Programme Learning Outcomes (PLO), Teaching & Learning (T&L) methods and Assessment methods:

No.	CLO*	PLO (Code)	**Taxonomies and ***generic skills	T&L methods	****Assessment methods
CLO 1	Describe the fundamentals of hygiene.	PLO1	A2 C2	Lecture, active learning	Quiz (10%) Test (15%)
CLO 2	Determine the potential occurrence of chemical, physical & biological hazards that will affect workers.	PLO2	C3	Lecture, active learning	Quizz (10%) Test (15%)
CLO 3	Apply procedures to monitor and manage occupational hygiene hazard.	PLO3	TH3	Lecture, active learning	PMA (25%)
CLO 4	Write report on occupational hygiene case study	PLO4	P3 CS3	Lecture, active learning	PMA (25%)

*This is the basic mapping required for the CI. Any added information is allowed (extra columns for weight or other elements) **provided** this is made consistent for all CI at program/school/faculty level.*

**Up to 5 CLO*

Prepared by: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Name:</td> <td>Dr Mohd Yusof Md Daud</td> </tr> <tr> <td>Signature:</td> <td></td> </tr> <tr> <td>Date:</td> <td>3 Feb 2021</td> </tr> </table>	Name:	Dr Mohd Yusof Md Daud	Signature:		Date:	3 Feb 2021	Certified by: <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%;">Name:</td> <td></td> </tr> <tr> <td>Signature:</td> <td></td> </tr> <tr> <td>Date:</td> <td></td> </tr> </table>	Name:		Signature:		Date:	
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Refer ****Taxonomies of Learning** and *****UTM's Graduate Attributes for UG and Generic Skills for PG**, where applicable for measurement of outcomes achievement
******T** – Test; **Q** – Quiz; **HW** – Homework; **Asg** – Assignment; **PR** – Project; **Pr** – Presentation; **F** – Final Exam, **PMA** – Post Module Assessment etc.

Details on Innovative T&L practices:

No.	Type	Implementation
1.	Teaching-learning	Interactive, two ways communication (lecture input not only from lecturer but also from students as well), open discussions. A short video may be used for specific topic to discuss in Buzz Group.

Weekly Schedule:

Week 1	Chapter 1 : Principle of Industrial Hygiene Occupational Hygiene and Health <ul style="list-style-type: none"> • Workplace Hazards • Physical • Biological Hazard • Industrial Hygiene • The Science and Art devoted • Prevention and Control Strategies • Evaluation/Assessment • Prevention and Control Strategies
Week 2	Chapter 2 : Chemical Hazard : Asbestos, Mineral Dust, Lead <ul style="list-style-type: none"> • Properties of Asbestos • How do asbestos fibers get in the air? • Health Effects of Lead • Mineral Dust • Factors Influencing Exposure • Communication of Hazard Quiz 1
Week 3	Chapter 3: Organic Solvent <ul style="list-style-type: none"> • Solvents • Typical Uses of Solvents • Health Hazards of Solvents • Solvents and Skin • Skin Adsorption of Liquid Solvents • Solvents and the Eyes • Solvent Vapors in the Air • Permissible Exposure Limits • Some Especially Dangerous Solvents Test 1
Week 4	Chapter 4 : Pesticide <ul style="list-style-type: none"> • Definition (Pesticides Act 1974) • Pesticides Components

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	<ul style="list-style-type: none"> • Pesticide Classification • Recognize Problem 	
Week 5	Chapter 5 : Chemical Health Risk Assessment (CHRA) <ul style="list-style-type: none"> • Objective • Concepts • Technique 	
Week 6	Chapter 6: Classification, Packaging and Labelling of Hazardous Chemical <ul style="list-style-type: none"> • OSH (CPL of CHH_) Reg. 1997 • Classification of Chemical • Chemical Packaging • Classification of Hazardous Chemicals • Definition of Chemical Hazards Classes • Method of Classification • Label • Supplier's Details • DOSH Guidelines Related to CPL Regulations Quiz 2	
Week 7	Chapter 7: Chemical Safety Data Sheets <ul style="list-style-type: none"> • Scope • CPL Regulations • What is a CSDS? • Guidelines on CSDS 	
Week 8	Chapter 8 : Vibration Hazard <ul style="list-style-type: none"> • Measurement of Vibration • Mechanism of Action • Whole Body Vibration • Segment Vibration • Vibration Disease • Prevention and Control of Vibration Hazards 	
Week 9	Chapter 9 : Chemical Hazard Management <ul style="list-style-type: none"> • Management of Chemicals • Health Hazards of Chemicals • Chemical Safety Arrangements • Purchasing of Chemical • Safe Storage, Transfer, Handling and Disposal • Exposure Monitoring • Training and Education Quiz 3	
Week 10	Chapter 10 : Biological Monitoring and Health Surveillance <ul style="list-style-type: none"> • Health Surveillance • Needs of Health Surveillance • When to Conduct Health Surveillance • Biological Monitoring 	
Week 11	Chapter 11 : Biological Hazards	

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	<ul style="list-style-type: none"> Effectiveness of workplace policies and procedures Level of compliance with universal precautions Effectiveness of information and training programme Effectiveness of post exposure follow-up
Week 12	Chapter 12: Occupational Noise Exposure <ul style="list-style-type: none"> Sound Component of Sound Type of Noise Health Effects of Noise Evaluation of Noise Medical Surveillance
Week 13	Chapter 13 : Biological Hazard <ul style="list-style-type: none"> Method of Exposure Factors That Influence Infection Prevention of Infection
Week 14	Chapter 14 : Ventilation and Indoor Air Quality <ul style="list-style-type: none"> Building Occupants Health Indoor Air Quality Control Measures

Transferable skills (generic skills learned in course of study which can be useful and utilised in other settings):

Critical Thinking
Effective Communication
Life-long Learning

Student learning time (SLT) details:

Distribution of student Learning Time (SLT) Course content outline	Teaching and Learning Activities						TOTAL SLT
	Guided Learning (Face to Face)				Guided Learning Non-Face to Face	Independent Learning Non-Face to face	
CLO	L	T	P	O			
CLO 1	10h			4h	10h	15h	39h
CLO 2	6h			4h	8h	15h	33h
CLO 3	10h			2h	6h	12h	30h
CLO 4	6h				4h	6h	16h
Total SLT	32h			10h	28h	48h	118h

Continuous Assessment		PLO (Code)	Percentage	Total SLT
1	Quiz	PLO1, PLO2	20	As in CLO1 & CLO2 (2h)
2	Test	PLO1, PLO2	30	2hr
Final Assessment			Percentage	Total SLT
3	Post Module Assessment	PLO3, PLO4	50	As in CLO3 & CLO4

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			(10h)
Grand Total		100	120h

L: Lecture, T: Tutorial, P: Practical, O: Others

Special requirement to deliver the course (e.g: software, nursery, computer lab, simulation room):

Own laptop computer with pre-installed Microsoft Word, Excel, PDF and Powerpoint.

Learning resources:

Text book (if applicable)

Nil

Main references

1. S. Z. Mansdorf (2019), Handbook of Occupational Safety and Health, 3rd edition, John Wiley, USA.
2. Frances Alston, Emily J. Millikin, Willie Piispanen (2018), Industrial Hygiene: Improving Worker Health through an Operational Risk Approach, CRC Press, USA.
3. P Tillman, Cherilyn (2007), Principles of occupational health and hygiene: An introduction, Allen & Unwin Academic, Australia.
4. David Grantham (1992), Occupational health and hygiene guidebook for the WHSO, Brisbane
5. Ashton, I., and Gill Frank, S. (1999), Monitoring for Health Hazards at Work 2nd edition, Blackwell Science Inc. Australia
6. Ed. Harris, Michael K. Jan (2000), Essential Resources for Industrial Hygiene: A Compendium of Current Practice Standards and Guidelines, American Industrial Hygiene Association (AIHA), USA

Additional references

Nil

Academic honesty and plagiarism: (Below is just a sample)

Assignments are individual tasks and NOT group activities (UNLESS EXPLICITLY INDICATED AS GROUP ACTIVITIES)
Copying of work (texts, simulation results etc.) from other students/groups or from other sources is not allowed. Brief quotations are allowed and then only if indicated as such. Existing texts should be reformulated with your own words used to explain what you have read. It is not acceptable to retype existing texts and just acknowledge the source as a reference. Be warned: students who submit copied work will obtain a mark of **zero** for the assignment and disciplinary steps may be taken by the Faculty. It is also unacceptable to do somebody else's work, to lend your work to them or to make your work available to them to copy.

Other additional information (Course policy, any specific instruction etc.):

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Disclaimer:

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Note:

This template has been filled in as a **sample** for a UG engineering program, please use the proper PLO code for other academic programs (Refer Hasil Pembelajaran Program (PLO) UTM berdasarkan MQF 2.0 at CIDU web page).